

CLAIMS:

1. A collating unit for automatically storing prescription containers dispensed by an automatic dispensing system, the collating unit comprising:
 - 5 a storage unit for storing the containers delivered by an infeed conveyor;
a plurality of holding areas formed within the storage unit for holding the containers;
 - a plurality of guide arms mounted within the storage unit and operable to maneuver the containers from the infeed conveyor into the plurality
10 of holding areas; and
 - a control system for controlling operation of the infeed conveyor and the plurality of guide arms.
2. The collating unit as claimed in claim 1, the storage unit including -
 - 15 a base positioned generally adjacent to the infeed conveyor;
a collating unit conveyor mounted on the base; and
 - a frame substantially surrounding and covering the infeed conveyor and the collating unit conveyor.
- 20 3. The collating unit as claimed in claim 2, wherein the infeed conveyor is an outfeed conveyor of the automatic dispensing system.
4. The collating unit as claimed in claim 3, wherein the frame includes a longitudinal slot extending a length of the collating unit and formed within the frame such
25 that when the frame is positioned over the infeed and collating unit conveyors, the longitudinal slot is generally positioned over the infeed conveyor.
5. The collating unit as claimed in claim 4, wherein the holding areas are formed within the frame of the storage unit, such that when the frame is positioned over
30 the infeed and collating unit conveyors, the holding areas formed within the frame are generally positioned over the collating unit conveyor.

6. The collating unit as claimed in claim 5, wherein each holding area includes an open end and a closed end, and the open end of each area is interconnected with the longitudinal slot, such that each holding area is formed in the frame at an angle less than 90° with respect to the longitudinal slot.

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7. The collating unit as claimed in claim 1, further including a plurality of sensors mounted in the storage unit for sensing the presence of containers stored in the collating unit.

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8. A collating unit for automatically storing prescription containers dispensed by an automatic dispensing system, the collating unit comprising:

an infeed conveyor for transporting the containers from the automatic dispensing system to the collating unit;

5 a collating unit conveyor positioned generally adjacent to the infeed conveyor;

a frame substantially surrounding and covering the infeed conveyor and the collating unit conveyor;

10 a plurality of holding areas formed within the frame for holding the containers;

a plurality of guide arms mounted between the infeed conveyor and the collating unit conveyor and operable to maneuver the containers from the infeed conveyor into the plurality of holding areas; and

15 a control system for controlling operation of the infeed conveyor, the collating unit conveyor, and the plurality of guide arms.

9. The collating unit as claimed in claim 8, further including -

a base positioned generally adjacent to the infeed conveyor, wherein the collating unit conveyor is mounted on the base, and

20 a plurality of sensors mounted on the frame and operable to sense the presence of stored containers.

10. The collating unit as claimed in claim 9, wherein the frame includes a longitudinal slot extending a length of the collating unit and formed within the frame

25 such that when the frame is positioned over the infeed and collating unit conveyors, the longitudinal slot is generally positioned over the infeed conveyor.

11. The collating unit as claimed in claim 10, wherein when the frame is positioned over the infeed and collating unit conveyors, the holding areas formed within

30 the frame are generally positioned over the collating unit conveyor.

12. The collating unit as claimed in claim 11, wherein each holding area includes an open end and a closed end, and the open end of each area is interconnected with the longitudinal slot, such that each holding area is formed in the frame at an angle less than 90° with respect to the longitudinal slot.

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13. A collating unit for automatically storing prescription containers dispensed by an automatic dispensing system, the collating unit comprising:

an infeed conveyor for transporting the containers from the automatic dispensing system to the collating unit;

5 a base positioned generally adjacent to the infeed conveyor;

a collating unit conveyor mounted on the base;

a frame substantially surrounding and covering the infeed conveyor and the collating unit conveyor;

10 a plurality of holding areas formed within the frame for holding the containers;

a plurality of guide arms mounted on the base between the infeed conveyor and the collating unit conveyor and operable to maneuver the containers from the infeed conveyor into the plurality of holding areas;

15 a plurality of sensors positioned on the frame and operable to sense the presence of the containers stored in the collating unit; and

a control system for controlling operation of the infeed conveyor, the collating unit conveyor, the plurality of guide arms, and the plurality of sensors.

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14. The collating unit as claimed in claim 13, wherein the collating unit is configured for use with an existing control center cooperating with the automatic dispensing system.

25 15. The collating unit as claimed in claim 14, wherein the infeed conveyor is an outfeed conveyor of the automatic dispensing system.

16. The collating unit as claimed in claim 15, wherein the base is positioned in an opening in a counter top of the control center.

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17. The collating unit as claimed in claim 16, wherein the frame includes a longitudinal slot extending a length of the collating unit and formed within the frame such that when the frame is positioned over the infeed and collating unit conveyors, the longitudinal slot is generally positioned over the infeed conveyor.

18. The collating unit as claimed in claim 17, wherein when the frame is positioned over the infeed and collating unit conveyors, the holding areas formed within the frame are generally positioned over the collating unit conveyor.

5 19. The collating unit as claimed in claim 18, wherein each holding area includes an open end and a closed end, and the open end of each area is interconnected with the longitudinal slot, such that each holding area is formed in the frame at an angle less than 90° with respect to the longitudinal slot.

10 20. The collating unit as claimed in claim 19, wherein sensors are positioned at an end of the longitudinal slot, at the closed end of each holding area, and at the open end of each holding area along a length of the longitudinal slot.

15 21. The collating unit as claimed in claim 20, the control system including -
a computing device from which the control system may be operated,
an infeed conveyor controller for controlling operation of the infeed
conveyor,
a collating unit conveyor for controlling operation of the collating unit
conveyor,
20 a guide arm controller for controlling operation of each guide arm,
a sensor controller for controlling operation of each sensor,
a central sensor controller for controlling operation of each sensor
controller,
an input device for inputting identifying information for the containers, such
25 as a patient's name or a script number for each container, into the
control system,
an indicia reader for reading a bar code associated with the container, and
at least one display that serves as an operator interface.

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